Chapter G:
Adaptation
(and Mitigation)

DRAFT Discussion Points
17 Aug 2011

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Chapter G: Context Setting

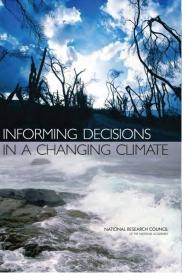
- Seek help!
- Change from original all-encompassing charge "mitigation, adaptation, disaster preparedness & response, inventories, assessments of tools & their effectiveness, data gathering & analyses, & international linkages & priorities"
- Propose to focus more on adaptation than mitigation.

Lots of guidance on thinking about

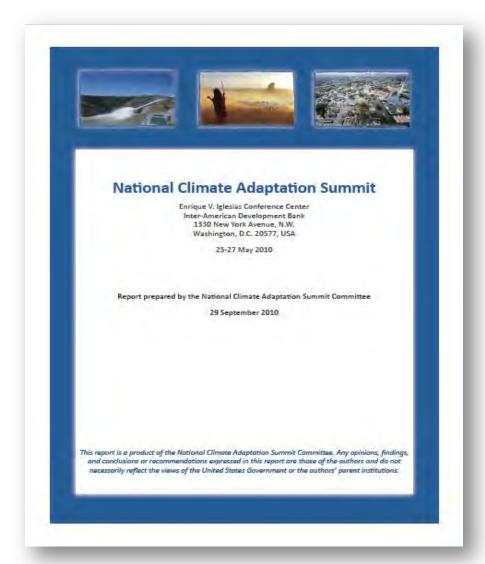


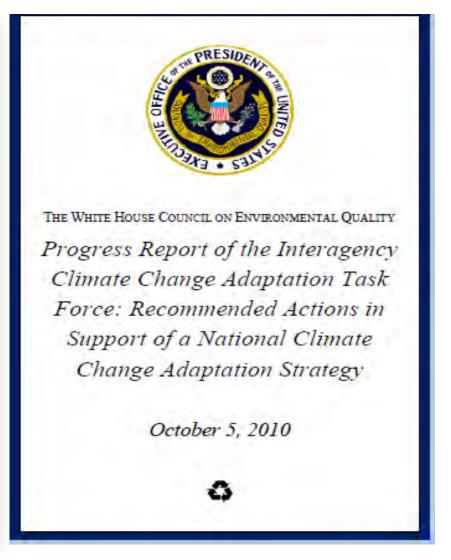












http://joss.ucar.edu/events/2010/ncas/summit_report.html www.whitehouse.gov/administration/eop/ceq/initiatives/adaptation

Adaptation requires making robust decisions

- Infrastructure to withstand new "extremes"
- Seed varieties that perform well in droughts/floods/heat; seed banks
- Prioritize lands to preserve and manage multiple threats
- Emergency response plans, early-warning alert systems
- Develop social safety nets / insurance
- Information systems / share best practices
- Weather & climate monitoring and services
- Regional assessments



Chapter G: Context Setting

- Discuss intersection of mitigation and adaptation
- Use a series of case studies to identify:
 - Decisions that need to be made
 - By whom
 - Data and tools that are available
 - Management/planning actions

Who is making decisions about climate change?

51	National	Regional	Local	International
Government	Federal agencies, Executive, Congress, Judiciary	Tribal &State governments, regional offices of Federal agencies, interstate networks (e.g., RGGI)	City, county and other local government	Intergovernmental organizations (e.g., World Bank, UNFCCC, ICLEI)
Private Sector	Corporate HQs, national business networks	Regional corporate offices, companies and business associations	Local businesses and associations	Multinational corporations, international business networks (e.g., WBCSD)
Non-profit organizations	Environment al and other NGOs	Regional offices of NGOs, regional organizations	Local NGOs	Internat'l environmental, humanitarian organizations
Citizens	citizen & consumer networks	Voters, citizen networks	Individuals as voters, consumers,	International citizens networks

Chapter G: Context Setting

Gaps and Data Needs

- Aggregate across the regions, sectors, cross-cuts, & international chapter
- Identify priority activities to enhance adaptation going forward
- Illustrate how the Federal Government can support and enable regional and local work, and vice versa.

- I. Introduction (with a risk-based framing)
 - Need for adaptation and mitigation
 - Brief overview of adaptation
 - Brief statement of purpose: how this report can inform adaptation decision-making
- II. Adaptation
 - A. Description of adaptation activities planned/taking place (discussion to include various scales and include international examples)
 - B. Adaptation and uncertainty (challenges associated with regional climate modeling as the basis for formulating adaptation and evaluating the effectiveness of actions; decision making in light of uncertainty)

- C. Adaptation Case studies: Extreme events, multiple impacts, and limits to adaptation
 - Disaster preparedness
 - Extreme Events
 - Limits to adaptation
- III. Interactions between Mitigation and Adaptation
 - Interactions between competing demands for land, water and energy, including intended and unintended consequences
 - Qualitative Case study(ies)

- IV. Research and development needs in support of adaptation
 - Research on the policy making process that will help the regions and sectors
 - Research on use of climate change information to support adaptation decision making
 - Describe the improvement in regional climate modeling and role in adaptation policy.
 - Research on use of tools, indexes, metrics, and best practices to support adaptation decision making

Chapter G: Adaptation (Considerations To Develop One Example)

- Example: Adaptation in the Energy Infrastructure
- Industry has robust analytic and design tools incorporating but not limited to factors of:
 - Cost
 - Schedule
 - Organizational capabilities
 - Physical risks
 - Other risks
- Key differentiators under potential climate changes include the quality of
 - Projected changes
 - Ranges of uncertainties in the climate modeling
 - Ranges of projected land use changes (and coastal or inland water access developments, where applicable).
- Need the "best" climate science assessments and other regional modeling to input these analytic and design tools for major capital projects.
- What are other examples of adaptation in ecosystems, land use changes, agriculture, and transportation infrastructure, other societal aspects?

Chapter G: Adaptation Feedback on the Approach

- Duplicative with what other chapters are doing?
- How to design cases studies? Suggestions for case studies?
- How to examine the adaptation/mitigation nexus most productively so that practitioners of both get usable information?
- What are the ongoing mitigation and/or adaptation activities (at what scale?) – Doing a survey? How to design a survey?
- Propose to organize 1-2 targeted workshops on adaptation efforts and welcome thoughts on how to build on previous workshops and future workshops

Need input from Regional/Sectoral/Cross-cutting/International chapters

- Adaptation tools, decision-support tools and paradigms (e.g., risk management) --where used and why? How successful? How do you measure success?
- The most important unresolved questions identified in your region? In your sector? And some sense of WHY these questions are both most important and also why they remain unresolved. What will it take to resolve them.
- Ideas on metrics and indicators of adaptation
- Consideration of co-benefits w/ mitigation, sustainable development, development paths...

Chapter G: Adaptation Summary

- Focus on adaptation
 - Take stock of what is happening on adaptation and what is needed to enhance it
- Address key issues and attributes, including:
 - Interactions of adaptation and mitigation
 - Use of climate science, tools, and best practices supporting decisionmaking in adaptation
- Develop case studies
- Help facilitate 1-2 workshops...
- Seek help from other chapters!